



California Regional Water Quality Control Board

Santa Ana Region

PAH/AES

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Terry Tamminen
Secretary for
Environmental
Protection

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<http://www.swrcb.ca.gov/rwqcb8>

Arnold Schwarzenegger
Governor

August 17, 2004

Commander
(Attn: Mr. Jerry Dunaway, Code 06CM.JD)
BRAC Environmental Coordinator
Southwest Division, Naval Facilities Engineering Command
1220 Pacific Hwy
San Diego CA 92132-5190

**SUBJECT: CLOSURE OF UNDERGROUND STORAGE TANK (UST) CASE
UST 16, BUILDING 16
SEVERYNS ROAD AND MATUS STREET, FORMER U. S. MARINE CORPS
AIR STATION, TUSTIN
CASE NO. 083004004T**

Dear Mr. Dunaway:

This letter confirms the completion of the site investigation, remedial action and groundwater monitoring which were required to mitigate the release(s) from the underground storage tank formerly located at the above described location. Enclosed is the Case Closure Summary for the referenced site for your records.

The petroleum contaminated soil was excavated in two phases. In May to June 2000, approximately 682 tons of petroleum contaminated soil were removed. Elevated concentrations of total petroleum hydrocarbons (TPH) as diesel were detected in two soil samples collected from the eastern sidewalls and in two floor samples collected at 18 feet below the surface. A water sample was collected from the bottom of the excavation and TPH diesel (30,000 micrograms/liter ($\mu\text{g/L}$)) and trichloroethylene (TCE) ($7.4 \mu\text{g/L}$) were detected in the water sample.

In September 2000, one soil boring was hand augered in the compressor shed and soil samples were collected at 3, 6, 9, 12, 15 and 18 feet. TPH was only detected in the soil samples collected at 15 (350 mg/kg) and 18 feet (520 mg/kg). No volatile organic compounds (VOCs) were detected in the soil samples.

In February 2004, approximately 135 tons of TPH contaminated soil were removed from the eastern side of the original excavation adjacent to Building 16. Soil samples were collected from the sidewalls and the floor of the excavation. No TPH diesel or VOCs were detected in the soil samples.

Three direct push borings were installed and groundwater samples were collected and analyzed for TPH diesel and VOCs. Low concentrations of TPH as diesel and TCE were

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detected in two of the samples. The TCE is related to the groundwater plume from IRP site 13W, which is under investigation. UST site 16 is within the boundaries of IRP site 13W. The residual TPH contamination is minimal and is not considered a threat to water quality.

Based on the information in the July 15, 2004 Draft Site Closure Report for Underground Storage Tanks 16, 27A and 27B, including the current land use, and with the provision that the information provided to this agency was accurate and representative of site conditions, no further action related to the underground storage tank release is required.

This notice is issued pursuant to a regulation contained in Title 23, California Code of Regulations, Division 3, Chapter 16, Section 2721 (e).

Please telephone Patricia Hannon at (951) 782-4498, or send e-mail to phannon@rb8.swrcb.ca.gov if you have any questions regarding this matter.

Sincerely,



Gerard J. Thibeault
Executive Officer

Attachment: Case Closure Summary

cc (w/ attachment): Mr. (Ram) Anantaraman Peddada, Dept. of Toxic Substances Control
Ms. DeAnna Dunbar, Southwest Division, Naval Facilities Engineering
Command
Mr. James Ricks, U. S. EPA, Region IX
Ms. Linda Dorn, Clean Water Prog., State Water Resources Control
Board
Mr. Dana Ogden, City of Tustin
Ms. Arghavan Rashidi-Fard, Orange County Health Care Agency

CASE CLOSURE SUMMARY

Leaking Underground Fuel Tank Program

I. Agency Information

DATE: 8/16/04

AGENCY NAME	California Regional Water Quality Control Board - Santa Ana Region	STAFF	Patricia Hannon
ADDRESS	3737 Main St. Suite 500	TITLE	Associate Engineering Geologist
CITY/STATE/ ZIP	Riverside CA 92501-3339	PHONE	(951) 782-4498, main # 782-4130

II. Case Information

SITE NAME	UST 16			
LOCATION	Building 16, Severyns Road and Matus Street, U. S. Marine Corps Air Station, Tustin			
REGIONAL BOARD CASE #	083004004T	LOCAL AGENCY CASE #	NA	
RESPONSIBLE PARTIES	ADDRESS		PHONE NUMBER	
Jerry Dunaway	1220 Pacific Hwy		(619) 532-0975	
Southwest Naval Facilities Engineering Control	San Diego CA 92132-5190			
TANK NO.	SIZE IN GALLONS	CONTENTS	CLOSED IN PLACE/ REMOVED	DATE
UST 16	1000	Fuel oil	Removed	Prior to 1991

III. Release and Site Characterization Information

SITE CHARACTERIZATION COMPLETE?	yes		
MONITORING WELLS INSTALLED?	no	NUMBER	na
DEEPEST GW DEPTH	28 ft.	SHALLOWEST GW DEPTH	18 ft.
GROUNDWATER, MOST SENSITIVE CURRENT USE:	municipal	GW FLOW DIRECTION	South southeast
DRINKING WATER WELL(S) AFFECTED?	no	AQUIFER NAME	Irvine Pressure Subbasin
IS SURFACE WATER AFFECTED?	no	NEAREST/AFFECTED SW NAME	Peters Canyon Wash
OFF-SITE BENEFICIAL USE IMPACTS (ADDRESSES/LOCATIONS):	none		
REPORT(S) ON FILE?	yes	WHERE IS/ARE REPORT(S) FILED?	R.W.Q.C.B. - Santa Ana Region
TREATMENT AND DISPOSAL OF AFFECTED MATERIAL			
MATERIAL	AMOUNT	ACTION (TREATMENT, DISPOSAL)/ DESTINATION	DATE
TANK/PIPING	1 UST	removed	Prior to 1991
FREE PRODUCT	none		
SOIL	682 tons	Treated in a on-site thermal desorption unit	June 2000
SOIL	135 tons	Hauled off-site for treatment in a thermal desorption unit	February 2003
GROUNDWATER			

'I. Release and Site Characterization Information (Continued)

Maximum Document Contaminant Concentration - Before and After Cleanup					
CONTAMINANT	SOIL (mg/kg)			WATER (µg/L)	
	Phase I excavation		After Phase II excavation	After Phase I excavation work	After Phase II excavation work
	Before	After		Collected from the excavation	Collected from a soil boring (Hydropunch)
BENZENE	NA	<3100 ND	<0.056	<5 ND	<5 ND
TOLUENE	NA	<3100 ND	<0.056	<5 ND	1.1
ETHYLBENZENE	NA	<3100 ND	<0.056	<5 ND	<5 ND
XYLENE	NA	<3100 ND	<0.112	<5 ND	<5 ND
MTBE	NA	<6200 ND	<0.11	<5 ND	<5 ND
TPH -gasoline	NA	8600	NA	2,200	NA
TPH - diesel	NA	4900	<13 ND	30,000	160
trichloroethene	NA	<3100 ND	<0.056	7.4	7.8
COMMENTS REGARDING INVESTIGATION AND REMEDIATION					
<p>The underground storage tank (UST) was removed prior to 1991.</p> <p>The petroleum contaminated soil was excavated in two phases. In May to June 2000, approximately 682 tons of petroleum contaminated soil were removed. The excavation dimensions were approximately 40 feet wide by 90 feet long with depths ranging from 14 to 18 feet. Elevated concentrations of total petroleum hydrocarbons (TPH) as diesel were detected in two soil samples collected from the eastern sidewalls and in two floor samples collected at 18 feet below the surface. A water sample was collected from the bottom of the excavation and TPH diesel (30,000 µg/L) and trichloroethylene (TCE) (7.4 µg/L) were detected in the water sample.</p> <p>In September 2000, one soil boring was hand augered in the compressor shed and soil samples were collected at 3, 6, 9, 12, 15 and 18 feet. TPH was only detected in the soil samples collected at 15 (350 mg/kg) and 18 feet (520 mg/kg). No VOCs were detected in the soil samples.</p> <p>In February 2004, approximately 135 tons of TPH contaminated soil were removed from the eastern side of the original excavation adjacent to Building 16. The excavation was 30 feet long by 20 feet wide and between 17 and 21 feet deep. Soil samples were collected from the sidewalls and the floor of the excavation. No TPH diesel or VOCs were detected in the soil samples.</p> <p>Three direct-push borings were advanced and water samples were collected and analyzed for TPH diesel and VOCs. Low concentrations of diesel and TCE were detected in the sample from the excavation area and the sample collected downgradient of the excavation. The TCE is related to the groundwater plume from IRP-13W, which is under investigation. UST site 16 is within the boundaries of IRP site 13W.</p> <p>The residual TPH contamination is minimal and we do not considered it continuing threat to water quality.</p> <p>Based on the information provided in the July 15, 2004 Draft Site Closure Report for Underground Storage Tanks 16, 27A and 27B, this site is recommended for closure.</p>					

IV. Closure

DOES COMPLETED CORRECTIVE ACTION PROTECT <i>EXISTING</i> BENEFICIAL USES PER REGIONAL BOARD BASIN PLAN?				yes	
DOES COMPLETED CORRECTIVE ACTION PROTECT <i>POTENTIAL</i> BENEFICIAL USES PER THE REGIONAL BOARD BASIN PLAN?				yes	
MONITORING WELLS	0	NUMBER DECOMMISSIONED	0	NUMBER RETAINED	0
LIST ENFORCEMENT ACTIONS TAKEN		none			
LIST ENFORCEMENT ACTIONS RESCINDED		none			

V. Regional Board Representative Data

STAFF	Patricia Hannon	TITLE	Engineering Geologist
SIGNATURE	<i>Patricia Hannon</i>	DATE	<i>August 16, 2004</i>
SUPERVISOR	Robert Holub	TITLE	Supervising Water Resources Control Engineer
SIGNATURE	<i>Robert Holub</i>	DATE	<i>August 16, 2004</i>